We claim:

1. A compound of the formula 1,

$$OCN-R^1-NHCOX-R^2-(Y)_n \quad (1),$$

where R^1 and R^2 are each a substituted or unsubstituted, linear or branched, saturated or unsaturated alkylene radical having from 1 to 20 carbon atoms, a substituted or unsubstituted, saturated or unsaturated cycloalkylene radical having from 3 to 20 carbon atoms, a substituted or unsubstituted arylene radical having from 3 to 20 carbon atoms, an arylenealkylene radical having from 4 to 20 carbon atoms, a heterocyclic radical or any linear or branched sequence of two or more of the radicals mentioned, if desired linked via ether, thioether, ester, amine or amide structures, X is a covalent bond to R^2 or O, S or NR^3, where R^3 is a hydrogen atom or a substituted or unsubstituted, linear or branched, saturated or unsaturated alkyl radical having from 1 to 20 carbon atoms, a substituted or unsubstituted, saturated or unsaturated cycloalkyl radical having from 3 to 20 carbon atoms, a substituted or unsubstituted aryl radical having from 3 to 20 carbon atoms, a heterocyclic radical or any linear or branched sequence of two or more of the radicals mentioned, Y is a hydrogen atom or a free functional group and n is an integer from 1 to 20.

2. A compound as claimed in claim 1, wherein Y is a free functional group selected from the group consisting of hydroxyl, amino, amido, carbonyl, carboxyl, mercapto, sulfonyl, sulfinyl, sulfenyl, sulfate, nitro, nitrile, isonitrile, cyanate, silyl, silanyl, phosphine, phosphate, phosphite, phosphonate, acrylate, methacrylate, allyl and vinyl and mixtures thereof.

3. A compound as claimed in claim 1, wherein the radical R^1 is selected from the group consisting of 2,4-tolylene, 2,6-tolylene, 4,4'-diphenylmethylene, 2,4'-diphenylmethylene, 3-alkyl-4,4'-diphenylmethylene, where alkyl is C_1-C_{10}-alkyl, 1,3- and 1,4-phenylene, 1,5-naphthylene, tolidinylene, biphenylene, tetramethylene, hexamethylene, dodecylene, alkyl pentamethylene-2-carboxylate, where alkyl is C_1-C_{10}-alkyl, isophoronylene, 2-methylpentamethylene, 2,2,4- and 2,4,4-trimethyl-1,6-hexamethylene, 1,3- and 1,4-cyclohexylene, 3-methylene-1-methyl-1-cyclohexylene, 2-butyl-2-ethylpentamethylene, 4-methyl-1,3-cyclohexylene,

4,4'- and 2,4'-methylenebis(cyclohexylene), xylylene, tetramethylxylylene and mixtures thereof.

4. A process for preparing a compound of the formula 1

$$OCN-R^1-NHCOX-R^2-(Y)_n \quad (1)$$

by reacting a diisocyanate of the formula 2

$$OCN-R^1-NCO \quad (2)$$

with a compound of the formula 3

$$HX-R^2-(Y)_n \quad (3),$$

where R^1, R^2, R^3, X, Y and n are defined as in claim 1 and X in formula 3 can also be OCO.

5. A process as claimed in claim 4, wherein the diisocyanate of the formula 2 is selected from the group consisting of 2,4-tolylene diisocyanate, 2,6-tolylene diisocyanate, diphenylmethane 4,4'-diisocyanate, diphenylmethane 2,4'-diisocyanate, 3-alkyldiphenylmethane 4,4'-diisocyanate, where alkyl is C_1-C_{10}-alkyl, phenylene 1,3- and 1,4-diisocyanate, naphthylene 1,5-diisocyanate, tolidine diisocyanate, biphenyl diisocyanate, tetramethylene diisocyanate, hexamethylene diisocyanate, dodecylene diisocyanate, lysine alkyl ester diisocyanate, where alkyl is C_1-C_{10}-alkyl, isophorone diisocyanate, 2-methylpentamethylene diisocyanate, 2,2,4- and 2,4,4-trimethylhexamethylene 1,6-diisocyanate, 1,4-diisocyanatocyclohexane, 3-isocyanatomethyl-1-methyl-1-isocyanatocyclohexane, 2-butyl-2-ethylpentamethylene diisocyanate, 2-isocyanatopropylcyclohexyl isocyanate, 4-methylcyclohexane 1,3-diisocyanate, dicyclohexylmethane 4,4'- and 2,4'-diisocyanate, 1,3- and 1,4-bis(isocyanatomethyl)cyclohexane, xylylene diisocyanate and tetramethylxylylene diisocyanate and mixtures thereof.

6. A process for functionalizing or modifying compounds or surfaces having at least one group which is reactive toward isocyanate, by reacting a compound of the formula 1

$$OCN-R^1-NHCOX-R^2-(Y)_n \quad (1),$$

where R^1 and R^2 are each a substituted or unsubstituted, linear or branched, saturated or unsaturated alkylene radical having from 1 to 20 carbon atoms, a substituted or unsubstituted, saturated or unsaturated cycloalkylene radical having from 3 to 20 carbon atoms, a substituted or unsubstituted arylene radical having from 3 to 20 carbon atoms, an arylenealkylene radical having from 4 to 20 carbon atoms, a heterocyclic radical or any linear or branched sequence of two or more of the radicals mentioned, if desired linked via ether, thioether, ester, amine or amide structures, X is a covalent bond to R^2 or O, S or NR^3, where R^3 is a hydrogen atom or a substituted or unsubstituted, linear or branched, saturated or unsaturated alkyl radical having from 1 to 20 carbon atoms, a substituted or unsubstituted, saturated or unsaturated cycloalkyl radical having from 3 to 20 carbon atoms, a substituted or unsubstituted aryl radical having from 3 to 20 carbon atoms, a heterocyclic radical or any linear or branched sequence of two or more of the radicals mentioned, Y is a hydrogen atom or a free functional group and n is an integer from 1 to 20,

with at least one isocyanate-reactive group of a compound having at least one isocyanate-reactive group, or with at least one isocyanate-reactive group on a surface which has at least one isocyanate-reactive group.

7. A process as claimed in claim 6, wherein Y is a free functional group selected from the group consisting of hydroxyl, amino, amido, carbonyl, carboxyl, mercapto, sulfonyl, sulfinyl, sulfenyl, sulfate, nitro, nitrile, isonitrile, cyanate, silyl, silanyl, phosphine, phosphate, phosphite, phosphonate, acrylate, methacrylate, allyl and vinyl and mixtures thereof.

8. A process as claimed in claim 6, wherein the compound which has at least one group which is reactive toward isocyanate is a monomer, polymer, dendrimer, hyperbranched polymer or star polymer containing at least one group which is reactive toward isocyanate.

9. A process as claimed in claim 8, wherein the monomer which has at least one group which is reactive toward isocyanate is selected from the group consisting of ethylene glycol, propylene glycol, butanediol, pentanediol, hexanediol, glycerol, trimethylolpropane, pentaerythritol, sorbitol,

sugar, ethylenediamine, butylenediamine, hexylenediamine and melamine.

10. A process as claimed in claim 8, wherein the polymer having at least one group which is reactive toward isocyanate is selected from the group consisting of polyether polyols, polyester polyols, polyacrylate polyols, polyvinyl alcohols, polyalkylenimines, polyalkyleneamines, polyamidoamines, polyacrylic acids and polymers bearing acid anhydride groups.

11. A process as claimed in claim 6, wherein the surface which has at least one group which is reactive toward isocyanate is a surface of wood, glass, textiles, ceramic materials, leather, paper, plastic, stone, concrete, metals or metal alloys, with the proviso that these surfaces have at least one group which is reactive toward isocyanate.

12. A process as claimed in claim 6, wherein the group which is reactive toward isocyanate is selected from the group consisting of hydroxyl, amino, amido, carboxyl and mercapto and mixtures thereof.

13. A process as claimed in claim 8, wherein the group which is reactive toward isocyanate is selected from the group consisting of hydroxyl, amino, amido, carboxyl and mercapto.